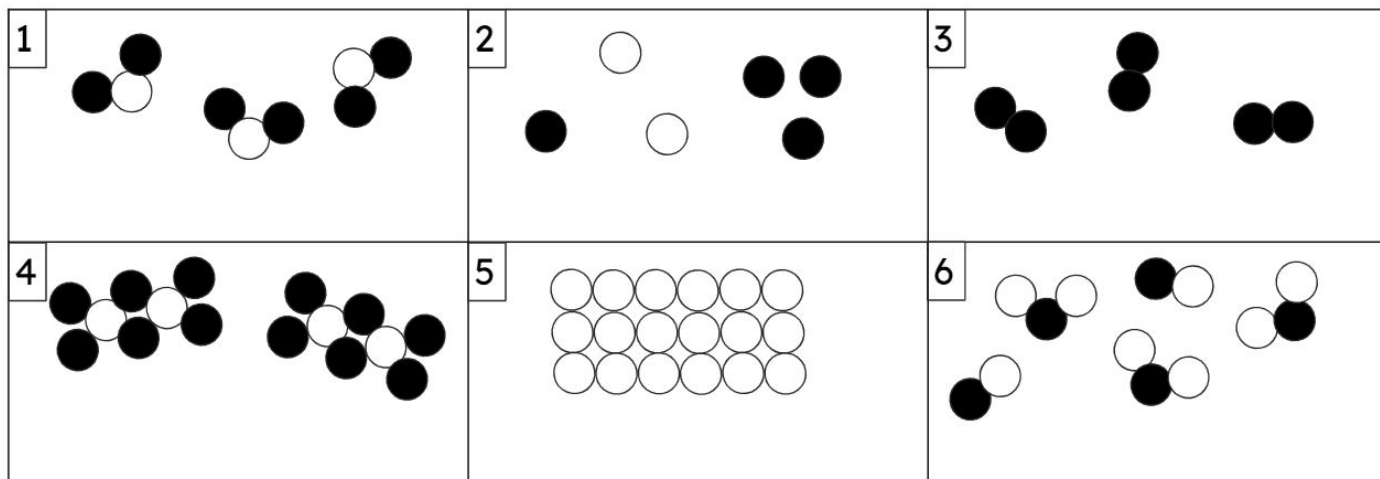


# Compounds



## Task 1: Defining compounds

a) **Label** each image using **two** of the keywords below.



atoms

molecule

compound

element

b) **Which** boxes show mixtures?

c) **Explain** why the diagrams you selected are mixtures.

## Task 1: Properties of compounds

Magnesium reacts with oxygen gas to produce magnesium oxide.

**Write** a paragraph about the reaction, stating whether each substance is an element or a compound and describe their different properties.



magnesium



oxygen



magnesium oxide

Name \_\_\_\_\_

Science Compounds



### Task 3: Naming compounds

a) **Identify** the elements present in these compounds.

Compound name	Elements present
lithium nitride	
aluminium bromide	
iron carbonate	
cobalt fluoride	
zinc nitrate	

b) **Name** each compound based on the elements it contains.

Elements present	Compound name
magnesium, oxygen	
copper, oxygen	
silver, nitrogen, oxygen	
potassium, nitrogen	
calcium, sulfur, oxygen	

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### Task 4: Formulae of compounds

**Complete** the table.

Atoms present	Compound name	Formula
1 lithium, 1 bromine	lithium bromide	LiBr
1 potassium, 1 fluorine		
1 calcium, 2 iodine		
2 caesium, 1 oxygen		
1 nitrogen, 2 oxygen		
1 iron, 3 chlorine		



## Task 1: Defining compounds

a) **Label** each image using **two** of the keywords below.

<p>1</p> <p>molecule      compound</p>	<p>2</p> <p>atoms      element</p>	<p>3</p> <p>molecule      element</p>
<p>4</p> <p>molecule      compound</p>	<p>5</p> <p>molecule      element</p>	<p>6</p> <p>molecule      compound</p>

atoms      molecule      compound      element

b) **Which** boxes show mixtures? *2 and 6*

c) **Explain** why the diagrams you selected are mixtures.

*There are two different substances that are not chemically bonded together.*

## Task 1: Properties of compounds

Magnesium reacts with oxygen gas to produce magnesium oxide.

**Write** a paragraph about the reaction, stating whether each substance is an element or a compound and describe their different properties.



magnesium

oxygen

magnesium oxide

*Check your answer includes the following points:*

- *Magnesium is an element.*
- *Oxygen is an element.*
- *Magnesium oxide is a compound.*
- *Magnesium is a metal.*
- *Oxygen is a non-metal/colourless gas.*
- *Magnesium oxide is a white powder.*

Name \_\_\_\_\_



### Task 3: Naming compounds

a) **Identify** the elements present in these compounds.

Compound name	Elements present
lithium nitride	<i>lithium, nitrogen</i>
aluminium bromide	<i>aluminium, bromine</i>
iron carbonate	<i>iron, carbon, oxygen</i>
cobalt fluoride	<i>cobalt, fluorine</i>
zinc nitrate	<i>zinc, nitrogen, oxygen</i>

b) **Name** each compound based on the elements it contains.

Elements present	Compound name
magnesium, oxygen	<i>magnesium oxide</i>
copper, oxygen	<i>copper oxide</i>
silver, nitrogen, oxygen	<i>silver nitrate</i>
potassium, nitrogen	<i>potassium nitride</i>
calcium, sulfur, oxygen	<i>calcium sulfate</i>

### Task 4: Formulae of compounds

**Complete** the table.

Atoms present	Compound name	Formula
1 lithium, 1 bromine	lithium bromide	LiBr
1 potassium, 1 fluorine	<i>potassium fluoride</i>	<i>KF</i>
1 calcium, 2 iodine	<i>calcium iodide</i>	<i>CaI<sub>2</sub></i>
2 caesium, 1 oxygen	<i>caesium oxide</i>	<i>Cs<sub>2</sub>O</i>
1 nitrogen, 2 oxygen	<i>nitrogen dioxide</i>	<i>NO<sub>2</sub></i>
1 iron, 3 chlorine	<i>iron chloride</i>	<i>FeCl<sub>3</sub></i>